

**PORTLAND VETERANS AFFAIRS MEDICAL CENTER
SUBCOMMITTEE ON ANIMAL STUDIES (PVAMC SAS)
ANIMAL CARE AND USE GUIDELINES**

CHECK ONE:

- ☐ I agree to comply with the following guidelines.
- ☐ I have attached written justification for deviation from these guidelines, and a description of the methods to be employed.

Principal Investigator

Date

GUIDELINES FOR USE OF PARALYTIC AGENTS

Background. While it is recognized that the systemic administration of skeletal muscle relaxants may be a necessary component of a particular protocol, the use of these agents renders assessment of pain and distress very difficult. Any deviation from these guidelines must be justified in writing in the animal protocol approved for the study and must be approved by the SAS.

Guidelines.

1. If paralytic agents must be used, paralysis should not be induced unless the animal has been anesthetized to a level judged to be no less than "light surgical anesthesia." Paralytic agents are not to be used on unanesthetized animals.
 - a. The Principal Investigator must provide evidence that the anesthetic regimen to be used on paralyzed animals prevents *unparalyzed* animals from experiencing significant pain or distress during procedures which are identical to those that are proposed for paralyzed animals.
2. Because of the difficulties inherent in assessing the state of anesthesia in paralyzed animals, investigators should avoid exposing paralyzed animals to potentially painful procedures.
3. Whenever it does not seriously interfere with the proposed experiments, investigators should periodically reassess the level of anesthesia in paralyzed animals by temporarily withholding muscle relaxants. The use of modern, intermediate-duration paralytic agents is encouraged, as it will facilitate making these periodic reassessments of level of anesthesia.
4. The adequacy of anesthesia throughout of the period of paralysis should be assessed by continuously monitoring the animal's heart rate.
5. The animal's temperature should be monitored and maintained within normal limits throughout the period of paralysis. Periodic measurement of blood pressure is encouraged.
6. During the period of paralysis provision must be made for voiding urine.

7. Because of the technical complexity of these procedures, individuals who perform them must have adequate training, or they must operate under the direct supervision of the Principal Investigator who signs the Animal Component. Competency must be demonstrated to the VMO.

REFERENCES

Kitchell RL and Erickson HH: *Animal Pain: Perceptions and Alleviation*. Bethesda, Maryland, American Physiological Society, 1983.

Oberdorfer M: Anesthesia and Paralysis in Experimental Animals: Report of a Workshop held in Bethesda, Maryland, October 27, 1984. *Visual Neuroscience* 1988;1:421-426.